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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,773	09/22/2004	Hiroshi Fujii	TASH-7	7976
20311	7590	11/29/2005		
LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			EXAMINER REESE, DAVID C	
			ART UNIT 3677	PAPER NUMBER

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/508,773

Applicant(s)

FUJII ET AL.

Examiner

David C. Reese

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 4-9, 12-16 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10, 11, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

[1] Claims 4-9, 12-16, and 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant's election with traverse of Claims 1-19 in the reply filed on 9/8/2005 is acknowledged. The traversal is on the ground(s) that Figures 8A-8E should also be included in species I, as they are modifications of said arrangement shown in Fig. 4. This is not found persuasive because it is stated in the brief description of drawings that Fig. 8 shows the multi-pitch screw and various multi-pitch nuts.

The requirement is still deemed proper and is therefore made FINAL.

Status of Claims

[2] Claims 1-19 are pending.

Information Disclosure Statement

[3] The information disclosure statement filed 9/22/2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because five of the six submitted references have not been submitted with said application. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 112

- [4] The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- [5] Claims 3 and 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the instant claim, the term “self-lock angle” lacks definiteness as no structure regarding the location of said angle with respect to said screw, nut, and/or relationship between the two is provided. More definition is needed to help properly claim the instant angle.

Claim Rejections - 35 USC § 102

- [6] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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[7] Claims 1-2, 10, and 17-18 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Pearson, US- 113,557, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

The shape and appearance of Pearson is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

As for Claim 1, Pearson teaches of a combination of a multi-pitch screw (Fig. 1) and a multi-pitch nut (Fig. 4) wherein the thread of a screw (Fig. 1) is formed such that sections having a mild lead angle (downward angle) and sections having a steep lead angle (upward angle) are continuous alternately during a single turn along a spiral line, said multi-pitch nut (Fig. 4) wherein the thread of a female screw is formed such that a section in which the lead angle (downward angle) is mild and a section in which the lead angle is steep (upward angle) are arranged alternately and continuously during a single turn along the spiral line.

Re: Claim 2, wherein the lead angle of said section having a mild lead angle (downward angle) of the multi-pitch screw (Fig. 1) is zero (depending on what one considers their reference line, the mild lead angle can be considered to be zero).

Re: Claim 10, wherein the lead angle of said section having a mild lead angle (downward angle) of the multi-pitch nut (Fig. 1) is zero (depending on what one considers their reference line, the mild lead angle can be considered to be zero).

Re: Claim 17, a feed screw device (combination of Figs. 1 and 4) comprising a combination of a multi-pitch screw (Fig. 1) and a multi-pitch nut (Fig. 4).

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Re: Claim 18, a screw fastener mechanism (combination of Figs. 1 and 4) comprising a combination of a multi-pitch screw (Fig. 1) and a multi-pitch nut (Fig. 4).

Conclusion

[8] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited further to show the state of the art with respect to this particular type of fastener; as well as their extreme relevance to the current application as many read extensively onto the claimed invention: please see submitted notice of reference cited.


[9] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. **Please also note the change in the fax phone number to (571) 273-8300 for the organization where this application or proceeding is assigned.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,
David Reese
Assistant Examiner
Art Unit 3677

DCR


ROBERT J. SANDY
PRIMARY EXAMINER